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ABSTRACT OF THE DISCLOSURE

An implantable medical device includes a detector for detecting the presence of a magnetic field, where the presence of the magnetic field is detected in response to the strength of the magnetic field exceeding a first preselected magnetic field threshold. The device further includes a processor for adjusting a stimulation rate provided by the implantable medical device in response to determining that the strength of the detected magnetic field exceeds a second preselected magnetic field threshold. The second preselected magnetic field threshold is greater than the first preselected magnetic field threshold. In another embodiment, the implantable device includes a detector for detecting the presence of a high frequency (HF) radiation interference signal and a processor for adjusting a stimulation rate provided by the implantable medical device in response to determining that the strength of the detected HF radiation interference signal exceeds a preselected HF radiation threshold.